Guidelines for disposal of old equipment

The Government of Rwanda (GoR) as illustrated in various strategies and policies is committed to driving a knowledge based economy and digital led social and economic transformation. The national digital inclusion strategy addresses challenges of access to smart devices and affordable digital adoption to bridge the digital divide.

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Introduction

The Government of Rwanda (GoR) as illustrated in various strategies and policies is committed to driving a knowledge based economy and digital led social and economic transformation. The national digital inclusion strategy addresses challenges of access to smart devices and affordable digital adoption to bridge the digital divide.

The Government of Rwanda continues to promote digital transformation through services and processes digitalization in all sectors and across government institutions. This contributes to the increase of smart devices penetration, mainly computers deployed for staff use as well as other IT equipment to support automated operations and better service delivery.

With time, IT equipment acquired by institutions gets old, broken, or outdated. Currently, some institutions have huge stock of devices in the above-described conditions. Therefore, this strategy for disposal of old IT equipment is to establish a framework to enable fast and effective re-use and disposal of the above-mentioned devices leveraging existing guidelines and legal instruments.

Objective

- Engage all government institutions and parastatals on establishing the status of old IT equipment to be disposed of in categories, by institution, and by sector.
- Address gaps in the implementation of existing the Law N° 50/2008 OF 09/09/2008 and guidelines determining the procedure for disposal of assets in government institutions.
- Bridge collaboration gaps among relevant stakeholders to be involved in the old IT equipment disposal.
  Shade light on recycling the used IT equipment and re-use.
- Have all the existing old IT equipment stocks in government institutions and parastatals cleared and ensure adoption of best practices.

Scope

These guidelines will be implemented by all Government of Rwanda institutions or parastatals that use the National treasury and donor funding to acquire IT or electronic devices.

Definitions

This section aims to provide definitions of what is meant by IT equipment, according to types of devices acquired by government institutions and parastatals.

An IT equipment in this context, is an equipment or part of a system which generates, stores or uses electrical power to process, store, retrieve and transmit information.

An old IT equipment in this context means an equipment which exceeded the standard life span (e.g. Max 5 years for computers and in consideration of value for money for other equipment), damaged beyond repair or whose repair cost exceeds 50% of its current value. It also means an IT equipment disqualified to support the minimum acceptable technologies in government institutions (Obsolete).

The following list comprises the equipment that are mostly acquired:

- Computer (Laptop /Desktop/ Server)
- Mobile devices (Tablet/Smartphone)
- Imaging devices (Printer /Scanner /Photocopier /All in one /X-Rays /Ultra sound /CT Scanners /3D Printers)
- Storage devices
- Display equipment (Projector /Screen /Smart Screen /Interactive whiteboards /Digital picture frame)
- TV and Radio receivers
- IP Phone
- GPS Devices
- Power generation and storage Equipment (Generator /UPS /Battery /Solar Chargers)
- Network equipment (Switch /Router / Access points / Firewall/ Surge protectors /Cables)
- Luggage scanners
- Sound system equipment (Audio Mixers/Amplifiers/Speakers/Microphones)
- Image capture devices (CCTV and Photo camera
- Cameras/DVR and NVR/camcorder)
- Video Conference/Teleconference equipment
- Cooling and heating equipment (Air Conditioner /Refrigerators /microwave)
- Emerging technology equipment (Drone/Virtual and Augmented reality glasses)
- Electronic and electrical labs equipment (Oscilloscope /Signal generator /Power supply unit /spectrum analyzer /Function generator /Multimeter /Cable tester).
- Electronic medical equipment (Ventilator /Sterilizers /ECG)
- Washing machines /Dish washer
- And any other IT equipment proven to fall in this category

Process

1. All institutions are required to establish the valuation committee composed at least by three members: (a) a finance personnel; (b) legal personnel (c) a designated IT staff with the responsibility to report to RISA to facilitate the process as per the LAW N° 50/2008 OF 09/09/2008, Ministerial order n° 007/2009 of 01/12/2009 and the specific guidelines on depreciation and disposal of computer equipment in basic education dated 01/12/2021, jointly done and published by RISA and REB, for schools.
2. In a three-month timeframe, the valuation committee in each government institution or parastatal is expected to produce the report with clear categorization of the IT equipment to be disposed of, including type, period under usage, quantities, state/condition of each device, depreciation value, and proposed disposal options.
3. The Chief Digital Officer or Business Analyst (for sectors whose Digitization Directorates are led by Business Analyst) in the respective sector will revise and validate the valuation report before recommending the execution of the selected disposal option to the Chief Budget Manager of the concerned institution.
4. The Chief Budget Manager will officially write to the Rwanda Housing Authority, copying Rwanda Information Society Authority, requesting for a non-objection to dispose of the assessed IT equipment with a description of the type, quantity and disposal option selected (Repair for reuse purpose, Complete destroy and or public auction).
5. **Exception**: Due to low rate of computer (smart devices) penetration, auction option is not recommended on obsolete computers or computers that can be repaired.
6. The Chief Digital Officer or Business Analyst (for sectors whose Digitization Directorates are led by Business Analyst) in the respective sector and the assigned IT personnel in the institution or parastatal, in collaboration with RISA will establish appropriate collection mechanisms at regional level, and to designated relevant stakeholders namely: Primary and Secondary schools, IPRCs/TVET schools, repair centers, Enviroserve, or other private operators, for the disposal of the equipment.

Ideal Approach

In consideration of the need to increase the smart devices ownership and access gaps, some institutions adopt frameworks to enable their staff members to own laptops, tablets, and smartphones after a defined usage period of about 4 Years.

Disposal Options for Old It Equipment

1. **Repair**: After assessment, some devices can be repaired internally or by outsourcing the repair services.
2. **Upgrade/replacement of some parts**: some devices such as desktops can be upgraded by adding a new hard drive, graphics card, or CPU and others to take the device to the acceptable condition.
3. **Recycle:** IT equipment can be recycled with the use of the Enviroserve framework.
4. **Donation/Transfer:** After assessment, non-functioning devices can be transferred into the academic sector where they can serve as didactic materials. Obsolete functioning equipment can be donated to close on smart devices access gaps in specific sectors of the economy (Example: lower Education, Digital Ambassador Program).
5. **Engagement with original manufactures:** leveraging their e-waste recycling, take back programs, and repurposing programs.

Key Points to Be Taken Into Consideration

Reference has been made to the Law N° 50/2008 OF 09/09/2008 determining the procedure for disposal of state private assets, E-waste management project already implemented to establish a national framework that offers an end-of-life solution for electronic and electrical waste as well as other regulations and practices applied by other countries and researchers that ensure a safe disposal of old or unwanted equipment. Therefore, the two following key points should be taken into consideration:

A. Consider the Data Protection and Privacy as well as Environmental Regulations

Data Protection and Privacy shall be taken into consideration either by making sure existing data on the device is safely removed, transferred, stored or erased, with exception of some sectors which carry sensitive data by nature (Health sector/ Security organs/ Financial institutions) which shall completely destroy storages before recycling, using institution owned shredding or crashing machine.

In order to ensure a complete data destruction, The Data Protection Officer of an institution which does not own any of the above machine shall escort the storage devices to the authorized e-waste recycling entity to be destroyed in her/his presence.

Other institutions may also destroy the storage after assessment of the necessity to destroy a certain storage by the established valuation committee. Considering the E- waste management ensuring the sustainable use of ICT in Rwanda, preventing the negative impact of electronic waste on health and environment but also strengthening the local economy through creation of green Jobs and supporting the recycling industry, institutions shall ensure that all old ICT equipment are appropriately disposed, including the tiny pieces resulted from the destroyed storage devices.

B. Subcontracting or outsourcing the Best Practices

In case outsourcing is the option, then, the concerned institution in collaboration with the analysis and valuation committee must ensure working with an IT company with relevant public liability insurance; and that Insurance cover starts from the moment they take possession of the old equipment. The insurance should cover both hardware and data.

Moreover, if outsourced, the company should also present and ensure the highest standards of environmental responsibility, safety and confidentiality.

Main Strategies for Disposal of Old It Equipment

Reference is made to Ministerial order n° 007/2009 of 01/12/2009 determining the institution and functioning of the asset disposal evaluation committee to set value for state private assets to be sold, exchanged, donated or completely destroyed. Reference is also made to Law N° 50/2008 OF 09/09/2008 determining the procedure for disposal of state private assets public institutions may sell, donate or destroy completely.

The below four options are strongly recommended while selecting disposal options by the valuation committee. This should be done with RISA's oversight.

Donation/Transfer of IT Equipment

- IT equipment disqualified to support the minimum acceptable technologies in government institutions shall be donated /transferred to startups, Academic institutions for didactic purpose, nonprofit institution or an association engaged in activities of general public interest.
- Functioning IT equipment which exceeded the standard life span shall be transferred to the academic institutions for didactic purpose.
- Smartphones, Tablets and computers falling under the category of IT equipment disqualified to support the minimum acceptable technologies in government institutions shall be donated to the community in order to rise the smart devices penetration.
- A non-functioning equipment can also be transferred to technical schools where they can serve the didactic purpose.

Sale/Auction of IT equipment

- In reference to Article V.4.(a), IT equipment falling under the category of IT equipment which exceeded the standard life span and IT equipment disqualified to support the minimum acceptable technologies in government institutions which was not donated to any of the startups, academic institutions or community shall be sold in public auction.
- For income generation purpose or any other valid reason, Institutions may directly opt the selling of old IT Equipment in public auction Equipment can be sold in a public auction in the event that the valuation committee determines the sale of IT equipment to be the best option and the auction should be conducted after acquiring authorization.

Recycle or Re-Use

- The process of repairing and re-use is done to extend equipment lifetime and prevent electronic devices from being simply thrown away.
- This process is strictly done by the competent repair company that has partnership with GoR by salvaging working components from multiple IT equipment whose repair cost exceeds 50% of its current value to form one functioning equipment.

- The repaired IT equipment will be strictly donated and reused in lower and secondary education in Rwanda, Digital Ambassador Program (DAP) or any other program or initiative after acquiring approval of RISA.
  This can also be done through the existing partnership between GoR and Enviroserve Ltd.

Complete Destruction of IT Equipment

This option can be applicable for IT devices damaged beyond repair that cannot be repaired, can cause harm to humans and that are no longer of any use. This IT equipment shall be collected and destroyed by an authorized e-waste management entity upon acquisition of a non-objection from Rwanda Housing Authority and Rwanda Information Society Authority.

Main Phases for Disposal of Old It Equipment

Sufficient thought and analysis must be carried out in advance to all aspects of old equipment disposal. Therefore, following phases are recommended to be taken into consideration by the valuation committee as well as other concerned personnel or institutions.

- Initially, the analysis and valuation committee should conduct an assessment and analysis to ensure safety disposal and compliance with relevant law, regulations and guidance already in place.
- Conduct an assets inventory and documentation: this phase consists of identifying and recording all necessary information about the IT devices to be disposed; it should capture at least the necessary information of devices such as (the year of manufacturing/current state/brand/ etc.)
- Conduct a technical analysis by the technical team to understand the level of functionality or current state of a device and provide a recommendation.
- Categorization of IT or electronic devices: this consists of grouping devices based on their level of functionalities/ brand/ year of manufacturing/current state etc.
- Recommendation: the valuation committee in collaboration with RISA based on the conducted study shall recommend the way forward to the concerned institution.
- Final report: A report that captures all the procedures followed, assessment conducted and necessary details regarding the IT equipment is to be prepared, signed and stored for future reference.

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